

Translation

PATENT COOPERATION TREATY

PCT/EP2002/001782



PCT

INTERNATIONAL PRELIMINARY EXAMINATION REPORT

(PCT Article 36 and Rule 70)

Applicant's or agent's file reference 92 213 a/se	FOR FURTHER ACTION See Notification of Transmittal of International Preliminary Examination Report (Form PCT/IPEA/416)	
International application No. PCT/EP2002/001782	International filing date (day/month/year) 20 February 2002 (20.02.2002)	Priority date (day/month/year) 20 February 2002 (20.02.2002)
International Patent Classification (IPC) or national classification and IPC B62D 65/00, B65G 49/04		
Applicant DÜRR SYSTEMS GMBH		

1. This international preliminary examination report has been prepared by this International Preliminary Examining Authority and is transmitted to the applicant according to Article 36.
2. This REPORT consists of a total of <u>8</u> sheets, including this cover sheet. <input type="checkbox"/> This report is also accompanied by ANNEXES, i.e., sheets of the description, claims and/or drawings which have been amended and are the basis for this report and/or sheets containing rectifications made before this Authority (see Rule 70.16 and Section 607 of the Administrative Instructions under the PCT). These annexes consist of a total of <u> </u> sheets.
3. This report contains indications relating to the following items: I <input checked="" type="checkbox"/> Basis of the report II <input type="checkbox"/> Priority III <input type="checkbox"/> Non-establishment of opinion with regard to novelty, inventive step and industrial applicability IV <input checked="" type="checkbox"/> Lack of unity of invention V <input checked="" type="checkbox"/> Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement VI <input type="checkbox"/> Certain documents cited VII <input type="checkbox"/> Certain defects in the international application VIII <input type="checkbox"/> Certain observations on the international application

Date of submission of the demand 27 August 2003 (27.08.2003)	Date of completion of this report 10 March 2004 (10.03.2004)
Name and mailing address of the IPEA/EP	Authorized officer
Facsimile No.	Telephone No.

INTERNATIONAL PRELIMINARY EXAMINATION REPORT

International application No.

PCT/EP2002/001782

I. Basis of the report

1. With regard to the elements of the international application:*

- ☒ the international application as originally filed
- ☒ the description:
 pages _____ 1-26 _____, as originally filed
 pages _____, filed with the demand
 pages _____, filed with the letter of _____
- ☒ the claims:
 pages _____ 1-33 _____, as originally filed
 pages _____, as amended (together with any statement under Article 19
 pages _____, filed with the demand
 pages _____, filed with the letter of _____
- ☒ the drawings:
 pages _____ 1/11-11/11 _____, as originally filed
 pages _____, filed with the demand
 pages _____, filed with the letter of _____
- ☐ the sequence listing part of the description:
 pages _____, as originally filed
 pages _____, filed with the demand
 pages _____, filed with the letter of _____

2. With regard to the language, all the elements marked above were available or furnished to this Authority in the language in which the international application was filed, unless otherwise indicated under this item. These elements were available or furnished to this Authority in the following language _____ which is:

- ☐ the language of a translation furnished for the purposes of international search (under Rule 23.1(b)).
- ☐ the language of publication of the international application (under Rule 48.3(b)).
- ☐ the language of the translation furnished for the purposes of international preliminary examination (under Rule 55.2 and/or 55.3).

3. With regard to any nucleotide and/or amino acid sequence disclosed in the international application, the international preliminary examination was carried out on the basis of the sequence listing:

- ☐ contained in the international application in written form.
- ☐ filed together with the international application in computer readable form.
- ☐ furnished subsequently to this Authority in written form.
- ☐ furnished subsequently to this Authority in computer readable form.
- ☐ The statement that the subsequently furnished written sequence listing does not go beyond the disclosure in the international application as filed has been furnished.
- ☐ The statement that the information recorded in computer readable form is identical to the written sequence listing has been furnished.

4. ☐ The amendments have resulted in the cancellation of:

- ☐ the description, pages _____
- ☐ the claims, Nos. _____
- ☐ the drawings, sheets/fig _____

5. ☐ This report has been established as if (some of) the amendments had not been made, since they have been considered to go beyond the disclosure as filed, as indicated in the Supplemental Box (Rule 70.2(c)).**

* Replacement sheets which have been furnished to the receiving Office in response to an invitation under Article 14 are referred to in this report as "originally filed" and are not annexed to this report since they do not contain amendments (Rule 70.16 and 70.17).

** Any replacement sheet containing such amendments must be referred to under item 1 and annexed to this report.

INTERNATIONAL PRELIMINARY EXAMINATION REPORT

International application No.

PCT/EP2002/001782

IV. Lack of unity of invention

1. In response to the invitation to restrict or pay additional fees the applicant has:

- ☐ restricted the claims.
- ☐ paid additional fees.
- ☐ paid additional fees under protest.
- ☒ neither restricted nor paid additional fees.

2. ☐ This Authority found that the requirement of unity of invention is not complied with and chose, according to Rule 68.1, not to invite the applicant to restrict or pay additional fees.

3. This Authority considers that the requirement of unity of invention in accordance with Rules 13.1, 13.2 and 13.3 is

- ☐ complied with.
- ☒ not complied with for the following reasons:

See supplemental sheet

4. Consequently, the following parts of the international application were the subject of international preliminary examination in establishing this report:

- ☐ all parts.
- ☒ the parts relating to claims Nos. _____

1-21

Supplemental Box

(To be used when the space in any of the preceding boxes is not sufficient)

Continuation of: IV.3.

Lack of unity of invention

1. The International Searching Authority has determined that the present international application contains two groups of inventions, namely:

1. Claims 1-21: DEVICE WITH A MODULAR DESIGN FOR HANDLING WORKPIECES;
2. Claims 22-33: METHOD FOR TRANSPORTING WORKPIECES BETWEEN TWO TRANSFER STATIONS.

2. Independent claims 1 and 22 share the following common technical features:

- a device having a transport track with one or more handling areas for handling the surfaces of workpieces;
- mounting carriages upon which the workpieces can be attached and which can be moved along the transport track.

These technical features constitute knowledge generally available to the person skilled in the art (see e.g. D1, D2, D3 or D4) and are thus not novel.

- 2.1. The technical feature that could possibly represent a contribution over the prior art by the device according to claim 1 (PCT Rule 13.2) lies in providing a device with a modular design, with
 - a first module comprising:
 - a transport track and
 - a guiding mechanism along the transport track,

Supplemental Box

(To be used when the space in any of the preceding boxes is not sufficient)

Continuation of: IV.3.

- a second module comprising one or more mounting carriages that can be moved along the guiding mechanism and
- various types of second modules, each of which can be combined with the first module.

This feature represents a solution to the problem of making the device for handling workpieces more flexible.

2.2. The technical features that could possibly represent a contribution over the prior art by the method according to claim 22 (PCT Rule 13.2) consist in the following method steps:

- transporting a workpiece to a first transfer station by means of a first conveyor mechanism;
- swinging a mounting carriage up around a swivel axis until the mounting carriage is supporting the workpiece;
- passing along the transport track to a second transfer station with an additional, step-by-step rotation in order to bring the workpiece in or out of one or more handling areas;
- swinging the mounting carriage down around the swivel axis in the area of the second transfer station; and simultaneously
- transporting the workpiece away by means of a second conveyor mechanism;
- transporting back to the first transfer station the mounting carriages, which have been pivoted approximately 90° from horizontal.

Supplemental Box

(To be used when the space in any of the preceding boxes is not sufficient)

Continuation of: IV.3.

The advantage of this method is that the space required for the entire device is minimized.

- 2.3. It is clear that the special technical features of the two groups of inventions are not the same. Since they solve different problems and have different effects, they also cannot be considered to be corresponding technical features.

For this reason, no technical relationship can be recognized among the inventions on the basis of these features and there is consequently a lack of unity of invention (PCT Rule 13.1 to 13.3).

3. The Examining Division concurs with the objection raised by the Search Division with regard to a lack of unity of invention.

V. Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement

1. Statement

Novelty (N)	Claims	1-21	YES
	Claims		NO
Inventive step (IS)	Claims	8, 9, 11-21	YES
	Claims	1-7, 10	NO
Industrial applicability (IA)	Claims	1-21	YES
	Claims		NO

2. Citations and explanations

Reference is made to the following documents:

D1: EP-A-0 030 882 (RENAULT) 24 June 1981 (1981-06-24)

D2: US-A-4 928 383 (KACZMAREK JAMES S ET AL) 29 May 1990
(1990-05-29)

D3: DE 39 06 857 A (TSUBAKIMOTO CHAIN CO) 3 May 1990
(1990-05-03)

D4: DE 196 41 048 A (FLAEKT AB) 16 April 1998 (1998-04-16), mentioned in the application.

1.1. Document D1 discloses (the references in parentheses are to D1):

a device for handling vehicle bodies (7), with a modular design with a first module comprising:

- a transport track with a plurality of handling areas (15) for handling the vehicle bodies (7), and
- a guiding mechanism (1) along the transport track (1),

and a second module comprising a plurality of mounting carriages (2) upon which the vehicle bodies (7) can be attached and which can be moved along the guidance mechanism (1),

various types of second modules each being combinable with the first module (see page 1, lines 20-23).

The subject matter of claim 1 differs from the device according to D1 in that the handling areas comprise surface handling areas.

Since surface handling robots are standard elements of a vehicle body transport track, the subject matter of **claim 1** cannot be considered inventive (PCT Article 33(3)).

- 1.2. Since document D1 also discloses all of the features of **claims 5-7 and 10**, the subject matter of these claims also does not involve an inventive step (PCT Article 33(3)).
2. Since the different types of mounting carriages according to document D2 can be used in the device according to document D3 without encountering the technical difficulties that could not be remedied in the course of normal technical procedures, the subject matter of **claims 1-4** does not involve an inventive step (PCT Article 33(3)).
3. The combination of features of dependent **claims 8, 9 and 11-21** is not suggested by the prior art. These claims thus satisfy the PCT requirements with respect to novelty and inventive step (PCT Article 33(2) and (3)).